CLAIM AMENDMENTS

1. (Currently Amended) A protection device for a stator of a turbine comprising a series of annular sectors ~~(12)~~ which can be coupled by ~~means of connection means~~ a connector, each sector ~~(12)~~ comprising a first side surface ~~(13)~~ which has at least one cavity ~~(14)~~ equipped with a bottom ~~(15)~~, ~~characterized in that~~ wherein each bottom ~~(15)~~ of said at least one cavity ~~(14)~~ is convex and in that each sector ~~(12)~~ comprises at least one stiffening rib ~~(16)~~ positioned inside said at least one cavity ~~(14)~~ and having a variable section in a longitudinal direction to modulate the rigidity of each sector ~~(12)~~.

2. (Currently Amended) The protection device ~~(10)~~ according to claim 1, ~~characterized in that~~ wherein said bottom ~~(15)~~ is convex in a circumferential and/or axial direction.

3. (Currently Amended) The protection device ~~(10)~~ according to claim 1 or 2, ~~characterized in that~~ wherein said convex bottom ~~(15)~~ has an apex which in an axial section has an axial curvature radius 70 which, divided by the radius of the rotor, has a value preferably ranging from 0.221 to 0.299.

4. (Currently Amended) The protection device ~~(10)~~ according to claim 3, wherein ~~characterized in that~~ said axial curvature radius ~~(70)~~, divided by the radius of the rotor, has a value equal to 0.260.

5. (Currently Amended) The protection device ~~(10)~~ according to claim ~~3 or 4~~, wherein ~~characterized in that~~ said apex in a radial section has a circumferential curvature radius ~~(60)~~ which, divided by the radius of the rotor, has a value preferably ranging from 0.365 to 0.494.

6. (Currently Amended) The protection device ~~(10)~~ according to claim 5, wherein ~~characterized in that~~ said circumferential curvature radius ~~(60)~~, divided by the radius of the rotor, has a value equal to 0.429.

7. (Currently Amended) The protection device ~~(10)~~ according to ~~any of the claims from~~ claim ~~3 to 6~~, wherein ~~characterized in that~~ said apex in an axial section has a distance ~~(80)~~ from one end of said at least one cavity ~~(14)~~, said distance ~~(80)~~ divided by an axial length of said at least one cavity ~~(14)~~ has a value ranging from 0.142 to 0.192.

8. (Currently Amended) The protection device ~~(10)~~ according to claim 7, wherein ~~characterized in that~~ said distance ~~(80)~~ divided by an axial length of said at least one cavity ~~(14)~~ has a value equal to 0.167.

9. (Currently Amended) The protection device ~~(10)~~ according to ~~any of the claims from~~claim ~~1 to 8~~, wherein ~~characterized in that~~ with respect to the axis of the turbine ~~(70)~~, said rib ~~(16)~~ along an axial direction is tilted by an angle ~~(50)~~ which ranges from 3.162° to 4.278°.

10. (Currently Amended) The protection device ~~(10)~~ according to claim 9, wherein ~~characterized in that~~ said angle ~~(50)~~ is 3.72°.

11. (Currently Amended) The protection device ~~(10)~~ according to ~~any of the claims from~~ claim ~~1 to 10~~, ~~characterized in that~~ wherein said rib ~~(16)~~ has a maximum axial height ~~(90)~~ which, divided by the axial length of said at least one cavity ~~(14)~~ has a value ranging from 0.133 to 0.180.

12 (Currently Amended) The protection device ~~(10)~~ according to claim 11, wherein ~~characterized in that~~ said maximum axial height ~~(90)~~, divided by the axial length of said at least one cavity ~~(14)~~ has a value equal to 0.156.

13. (Currently Amended) The protection device ~~(10)~~ according to ~~any of the claims from~~ claim 1 ~~to 12~~, wherein ~~characterized in that~~ each sector ~~(12)~~ comprises a sheet ~~(20)~~ equipped with a series of pass-through holes ~~(21)~~ which is fixed to said at least one cavity ~~(14)~~.

14. (Currently Amended) The protection device ~~(10)~~ according to claim 13, wherein ~~characterized in that~~ said sheet ~~(20)~~ is integral with the corresponding sector ~~(12)~~ of said series of sectors ~~(12)~~.